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EAST ASIATIC AND ORIENTAL SPECIES OF
STENUS REPRESENTED IN THE COLLECTION
OF THE CALIFORNIA ACADEMY OF SCIENCES
(COLEOPTERA: STAPHYLINIDAE)

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Through the kindness of Mr. Hugh B. Leech I borrowed a small number of west hemisphere species of *Stenus*. Amongst the material which is quoted here, there was a new species from Taiwan. This species is described below. Although our knowledge of the Taiwan *Stenus* fauna is very poor, a key to all species known from that island is given.

Stenus (*sensu stricto*) *alienus* Sharp.

Stenus alienus SHARP, 1874, Trans. Ent. Soc. London (1874), p. 81.

MATERIAL. One male: Tokyo, 17 May 1931, Gressitt; one female: Manchuria: Mukden, 14 August 1923, Van Dyke.

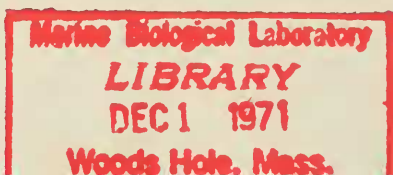
This species is widely distributed in the southeast palearctic; it is also known from Taiwan: Takakiyama, Sauter (Zoological Museum, Berlin).

Stenus (*sensu stricto*) *comma* LeConte.

Stenus comma LECONTE, 1863, Smithson. Miscell. Coll., no. 167, p. 50.

MATERIAL. Two females: Nanking, 14 September 1923, Van Dyke; one female: Manchuria: Kirin, 1 September 1923, Van Dyke; one female: Manchuria: Halling NE, 30 August 1923, Van Dyke.

This species occurs over all the northern hemisphere.



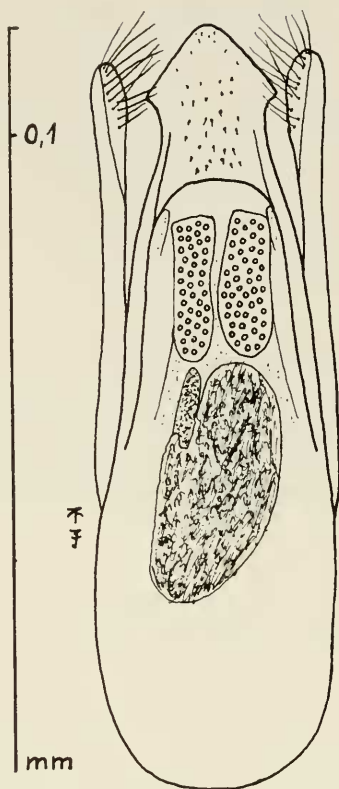


FIGURE 1. *Stenus* (*sensu stricto*) *insulanus* Puthz, new species (paratype), ventral aspect of aedeagus.

***Stenus* (*sensu stricto*) *insulanus* Puthz, new species.**

(Figure 1.)

This new species belongs to the species complex which has the abdomen feebly margined and in which abdominal keels are lacking.

Black, feebly shining, coarsely, partly rugosely, and very closely, punctured, feebly pubescent. Antennae dark brown. Palpi reddish yellow, 3rd joint infuscated. Legs dark brown. Length 4.7–5.1 mm.

Description. Head: distinctly narrower than elytra ($1,000\ \mu : 1,100\ \mu$), front moderately broad (average distance between eyes: $602\ \mu$), deeply concave with two longitudinal furrows, median part narrower than each of the side-pieces, feebly elevated, deeply under the level of the inner margin of eyes. Punctuation moderately coarse and very dense, diameter of puncture larger than section of 3rd antennal segment, interspaces at most as large as half of a punc-

ture. *Antennae*: damaged in the types, presumably constructed as in *S. sauterianus*.

Prothorax: distinctly longer than broad ($884\ \mu$: $756\ \mu$), broadest somewhat behind middle, sides to anterior margin nearly straight, to posterior margin distinctly concave. A feebly horizontal constriction behind anterior margin and a short longitudinal impression on posterior part discally. Punctuation coarse and rugose, somewhat coarser than on head.

Elytra: distinctly broader than head ($1,100\ \mu$: $1,000\ \mu$), about as broad as long, humeri prominent, sides roundly enlarged, restricted in posterior third, posterior margin moderately deeply emarginate. Sutural impression deep, humeral impression distinct. Punctuation coarse and very dense, coarser than on pronotum, rugosely in lateral direction in outer two-thirds.

Abdomen: feebly narrowed towards apex, sides very feebly margined, paratergites almost smaller than one puncture, basal restrictions of first tergites deep without any cusp. Punctuation moderately fine and very dense, somewhat finer than on the front of the head. Legs robust, hind tarsi about as long as two-thirds of the tibiae, 1st segment longer than 2nd and 3rd together, longer than the last. The dorsal surface of the whole insect lacks ground sculpture.

Male: metasternum deeply coriaceous. Tibiae without apical spines. Fourth to 6th sternites very feebly emarginate at posterior margin; 7th sternite with a shallow but distinct emargination at posterior margin, in front of it shallowly impressed and between the punctures deeply coriaceous; 8th sternite with a moderately deep notch in posterior tenth; 9th sternite with strong apicolateral teeth, between them deeply emarginate and serrate; 10th tergite at smooth posterior margin, broadly rounded, slightly concave in the middle.

Aedeagus (fig. 1): broad, the median lobe with a broad lancet-like anterior portion set with short setae ventrally. In the inner lobe there are broad longitudinal expulsion bands and a membranous internal sac with short spines or clasps having a stronger sclerotized portion apically. The parameres are shorter than the median lobe, enlarged anteriorly, and with many setae.

Female: eighth sternite rounded apically; valvifera with a strong lateral tooth; 10th tergite as in male; no sclerotized spermatheca.

TYPE MATERIAL. Holotype, male, and male and female paratypes (female partly damaged): Taiwan, Keelung (= Chi-lung), June 1954, T. C. Maa. Holotype in the California Academy of Sciences, paratypes in the California Academy of Sciences and in the collection of the author.

At present I do not know the sister-species (*sensu* Hennig) of *Stenus insulanus*. Its closest relatives known are *S. duplex* Benick (China) and *S. sauterianus* Bernhauer (Taiwan). For identification see the key below.

KEY TO THE SPECIES OF *STENUS* FROM TAIWAN

- 1 (24) Abdomen margined
- 2 (11) 4th tarsal segment simple

- 3 (4) Elytra with a reddish yellow spot. Length 4.2–5.0 mm. *S. alienus* Sharp
- 4 (3) Elytra unicolorous
- 5 (8) Abdomen without carinae in basal restrictions of tergites
- 6 (7) Abdomen broadly margined, elytra near suture irregular and smooth. Median lobe nearly straight-sided to acute apex. Length 5.0–5.5 mm.
..... *S. sauterianus* Bernhauer
- 7 (6) Abdomen very finely margined, elytra near suture coarsely and very densely punctured. Median lobe as in fig. 1. Length 4.7–5.1 mm.
..... *S. insulanus* Puthz, new species
- 8 (5) Abdomen with keels in basal restrictions of tergites
- 9 (10) Abdominal carinae 3-cuspid; male sexual characters as in fig. 4 of Benick, 1941. Length 5.0–5.8 mm. *S. formosanus* L. Benick
(synonyms *S. formosae* Wendeler, *S. forterugosus* Bernhauer, *S. submarginatus* Bernhauer)
- 10 (9) Abdominal carinae 4-cuspid. Aedeagus (compare Benick 1915, fig. 5). Length 2.9–3.5 mm *S. melanarius verecundus* Sharp
- 11 (2) 4th tarsal segment bilobed
- 12 (15) Elytra immaculate
- 13 (14) Larger species, 6.0 mm. long. Median lobe broadly truncate at apex, apical portion longer than basal one *S. rugosipennis* Cameron
- 14 (13) Smaller species, 3.7–4.2 mm. long. Median lobe rounded at apex, parameres enlarged trumpet-like to apex *S. rugipennis* Sharp
(*Stenus sharpianus* Cameron, 1930 (Ent. Monthly Mag., vol. 66; A 205), new synonymy.) I borrowed the types of *S. rugipennis* and *S. sharpianus* from the British Museum (Natural History); they are conspecific!
- 15 (12) Elytra with yellow or reddish spots
- 16 (19) Head nearly as broad or broader than elytra with very large eyes
- 17 (18) Elytral spot larger, as large as 4–5 punctures together. Aedeagus as in fig. 12 of Puthz, 1968a. Length 6.0–7.2 mm. *S. gestroi taiwanensis* Puthz
(in the diagnosis I regarded this as a subspecies of *S. submaculatus* Bernhauer; since then I have found that *S. submaculatus* and *S. taiwanensis* both are subspecies of the polytypic *S. gestroi* Fauvel)
- 18 (17) Elytral spot smaller, as large as 2 punctures together. Median lobe extending distinctly beyond the parameres. Length 5.2–5.7 mm. ... *S. stigmatipennis* L. Benick
- 19 (16) Head distinctly narrower than elytra, eyes smaller
- 20 (21) Larger, abdomen very finely bordered laterally. Aedeagus as in fig. 19 of Puthz, 1968a. Length 5.5–6.0 mm. *S. mirwai* Bernhauer
- 21 (20) Smaller, not exceeding 5.3 mm.
- 22 (23) Abdominal punctuation fine and very dense. Aedeagus as in fig. 62 of Puthz (1969). Length 4.5–5.0 mm. *S. virgula* Fauvel
(synonym *S. kwantungensis* Cameron)
- 23 (22) Abdominal punctuation moderately coarse and moderately close. Aedeagus narrower, median lobe truncate apically. Length 4.5–5.3 mm. *S. arisanus* Cameron
- 24 (1) Abdomen emarginate. Prothorax and abdominal segments 3 to 6 reddish yellow. Aedeagus as in fig. 3 of Scheerpeltz, 1957. Length 5.0–5.6 mm.
..... *S. flavidulus paederinus* Champion
(one male in British Museum from Taiwan).

***Stenus* (*Hypostenus*) *mercator* Sharp.**

Stenus mercator SHARP, 1889, Ann. Mag. Nat. Hist., 6th ser., vol. 3, no. 16, p. 333.

MATERIAL. One male: Nanking, 14 March 1923, Van Dyke. Known from China to Japan.

Stenus (Hypostenus) cicindeloides (Schaller).

Staphylinus cicindeloides SCHALLER, 1783, Abh. Hallisch. Naturforsch. Ges., vol. 1, p. 324.

MATERIAL. Six females: Nanking, 23 March and 21 April 1923, Van Dyke; two females: Suisapa, 1,000 m., Lichuan District, West Ho-peï, 25 July 1948, Gressitt and Djou.

This species occurs over the whole Palearctic region, south to Vietnam.

Stenus (Hypostenus) tropicus Bernhauer.

Stenus tropicus BERNHAUER, 1915, Philippine Jour. Sci., ser. D, vol. 10, p. 119.

MATERIAL. One male: Manila, May 1906, J. C. Thompson.

Well known from the Philippines.

Stenus (Hypostenus) nothus L. Benick.

Stenus nothus L. BENICK, 1929, Dtsch. Ent. Zeitschr., vol. 4, p. 264.

MATERIAL. Three males, two females: San Jose, Mindoro, April, October 1945, E. S. Ross.

Known from Mindoro, also distributed over Borneo and Celebes (British Museum).

Stenus (Hypostenus) ambiguus L. Benick.

Stenus ambiguus L. BENICK, 1929, Dtsch. Ent. Zeitschr., Heft 4, p. 266.

MATERIAL. Two males, two females: Luzon: Mabatobato, Pili Camarines Sur, 16 May 1931, E. E. Schneider.

The aedeagus of this species strongly resembles that of *S. nothus* Benick, but the median lobe extends somewhat beyond the parameres.

Stenus (Hypostenus) spinosus L. Benick.

Stenus spinosus L. BENICK, 1921, Ent. Mitt., vol. 10, no. 6, p. 193.

MATERIAL. One male: Mt. Makiling, Laguna, 800 ft., 5 May 1932, F. C. Hadden.

This species was described from Mt. Makiling.

Stenus (Hypostenus) subtropicus Cameron.

Stenus subtropicus CAMERON, 1949, Proc. U.S. Nat. Mus., vol. 99, no. 3247, p. 464.

MATERIAL. One female: Hai-nan: Ta Hiau, 16 June 1935, Gressitt.

This species has the aedeagus of *S. basicornis* Kraatz and might represent an eastern subspecies of it. A male has also been collected from Pho Vi, Tonkin (in collection of Benick).

***Stenus (Parastenus) bicolon javanicus* Bernhauer.**

Stenus (Hemistenus) javanicus BERNHAUER, 1915, Tijdschr. Ent., vol. 58, p. 216.

Stenus (Parastenus) javanicus L. BENICK, 1938, Stettiner Ent. Zeitung, vol. 99, no. 1, pp. 10, 11 (fig.).

Stenus (Mesostenus) bernhaueri CAMERON, 1925 (nec *S. bernhaueri* Poppius, 1907), Treubia, vol. 6, no. 2, p. 177.

Stenus (Hemistenus) maximiliani SCHEERPELTZ, 1933, Coleopt. Cat., vol. 129, p. 1192.

Stenus (Parastenus) bicolon javanicus PUTHZ, 1968b, Notulae Ent., vol. 48, p. 100.

MATERIAL. One female: Bali: Bretam Lake, 3,600 ft., 1 October 1956, J. Sedlacek.

Until now only known from Java.

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